DOE F 1325.8
(3/02)

United States Government **Department of Energy**
Oak Ridge Operations

memorandum

DATE: February 1, 2005

REPLY TO ATTN OF: M-1: Boyd

SUBJECT: **ANNUAL WORKFORCE ANALYSIS AND STAFFING PLAN REPORT**

TO: Roy J. Schepens, Chairman, Federal Technical Capability Panel

In accordance with your September 16, 2004, memorandum, subject as above, I am pleased to provide you with the Oak Ridge Operations Annual Workforce Analysis and Staffing Plan Report. This Report is focused on facility representative positions and safety system oversight personnel. The analysis employs a risk-based methodology derived from the September 2004 Federal Technical Capability Program Panel guidelines and other DOE guidance.

Should you have questions regarding this Report, please feel free to contact me at (865) 576-4444 or have your staff contact Patricia Howse-Smith, Director, Human Resources Division at (865) 576-0928.

Gerald G. Boyd
Manager

Attachment

cc w/attachment:
Milton Johnson, SC-1
George Malosh, M-2
Robert Brown, M-3

U.S. Department of Energy
Oak Ridge Operations Office

Annual Workforce Analysis
and
Staffing Plan Report
for
Facility Representatives and
Safety System Oversight Personnel

January 2005

Table of Contents

DOE Oak Ridge Operations
Annual Workforce Analysis and Staffing Plan

Section 1: Current Mission and Potential Changes

The Oak Ridge Operations Office (ORO) is a diverse office with key missions in Science and Technology, Environmental Management, Assets Utilization, and Uranium Programs. In addition, ORO manages four service centers that support ORO and/or other Department of Energy (DOE) sites/locations: the Financial Service, National Electronics Recycling, Precious Metals Sales and Recovery, and Materials Recycle Service Center(s). These programs and service centers are supported by staff from matrix support organizations located in Oak Ridge, Tennessee.

This Workforce Analysis and Staffing Plan Report for facility representatives and safety system oversight personnel was prepared by the Human Resources Division with technical input provided by the Assistant Manager for Environmental Management (AMEM); Assistant Manager for Environment, Safety and Health (AMESH); and Assistant Manager for Laboratory (AML) organizations. These three technical organizations are responsible for the Safety System Oversight (SSO) Program. The AMESH is a support organization that is currently coordinating the establishment of the SSO Program, and AML and AMEM are line organizations, which also maintain a cadre of facility representatives (FRs). The following paragraphs describe the primary missions of these three organizations.

DOE operations in Oak Ridge must comply with environmental criteria established by a number of Federal and State statutes and regulations, Executive Orders, DOE orders, and compliance agreements. The ORO AMESH organization is responsible for developing effective and efficient environmental protection, safety, health, and quality programs and guidance applicable to all ORO programs. As a part of this program, the Oak Ridge Reservation has an extensive environmental monitoring program designed to meet applicable laws and standards and to protect the public and environment. Literally thousands of samples are collected and analyzed annually. The program, at a cost of approximately $12.8 million per year, consists of both effluent monitoring and environmental surveillance.

The Environmental Management (EM) Program Mission in Oak Ridge is to complete cleanup safely with reduced risks to the public, workers, and the environment at the East Tennessee Technology Park (ETTP), Oak Ridge National Laboratory (ORNL), Y-12 National Security Complex - National Nuclear Security Administration (NNSA), and off-site areas. These risks include potential exposure to contamination and industrial hazards resulting from decades of uranium enrichment (ETTP), research (ORNL), and weapons-related operations (NNSA). ORO has developed a plan to accelerate completion of this EM Program and reduce approximately $2 billion in total lifecycle costs, which is 35% lower than the current estimate. The ORO EM Plan includes remediation of the highest risk sites on the Oak Ridge Reservation (by 2006), final disposition of one of the largest legacy low-level waste inventories in the DOE Complex (by 2005), and closure of the ETTP site (by 2008).

ORNL is an international leader in a range of scientific areas that support the Department of Energy's mission in the Office of Science. The laboratory's six major scientific competencies include neutron science, energy, high performance computing, complex biological systems, advanced materials, and national security. ORNL is in the midst of a $300M plan to provide a modern campus for the next

generation of great science. A unique combination of federal, state and private funds is building eleven new facilities. Included in these new facilities will be the Functional Genomics Center, the Center for Nanophase Materials Science, the Advance Materials Characterization Laboratory, and the Joint Institute for Computational Science. On budget and on schedule for completion in 2006, the $1.4 billion Spallation Neutron Source will make Oak Ridge the world's foremost center for neutron science research.

There are 16 Category 2 and 3 nuclear facilities represented in the SSO portion of the Workforce Analysis and Staffing Plan Report, and 70 facilities and activities (nuclear and non-nuclear) for the FR portion. Of these, nine are undergoing decontamination and decommission (D&D).

Section 2: Technical Staffing

These workforce analyses for the FR and SSO positions employ a risk-based methodology derived from the September 2004 Federal Technical Capability Program (FTCP) Panel guidelines and other DOE guidance.

The workforce analyses for the AML and AMEM FRs, completed in April and June 2004 respectively, were based on the requirements in DOE-STD-1063-2000, *Facility Representatives*, and also reflect the logic in the FTCP Panel guidelines. These analyses are shown in the attached worksheets.

The workforce analyses for the SSO personnel were completed in December 2004 and are displayed in the attached worksheets. The worksheets use a similar risk-based logic for SSO staffing as was used for the FR staffing. Though the FR worksheets address defense and non-defense nuclear facilities, the safety system oversight program only addresses defense nuclear facilities.

The following paragraphs summarize the results of the attached analysis worksheets.

Facility Representatives

Environmental Management:

EM currently has 13 Full Time Equivalent (FTE) FRs and one full time Team Leader to oversee the 69 facilities and activities. Two of the 13 FRs are currently in training.

The analysis shows that 18.4 FTEs are needed; this includes adjustments made for reduced surveillance and maintenance activities, and reduced D&D activities.

Laboratory:

The Laboratory has 6 FTE FRs and one part-time Team Leader FR to oversee the 8 facilities and activities. One FR is completing his facility-specific qualification and two recently hired FRs are currently completing their initial qualifications, one of whom has completed his interim qualification.

The analysis shows that 5 FTEs are needed and 6 FTEs are in place. One of these FTE's is on extended military leave.

Safety System Oversight Personnel

The AMESH organization is hiring two fire protection engineers and one criticality safety engineer who will provide matrix support to line management as needed for the existing SSO personnel/functions.

Environmental Management:

AMESH. A matrixed staff person from the AMESH for the instrumentation and control (I&C) function is expected to be assigned in 2005.

Laboratory:

The ORNL Site Office has designated a total of .6 FTE to fulfill the SSO requirements, and has specified the appropriate staff to fulfill the required SSO functions. Two individuals are matrixed from the AMESH.

Section 3: Current Shortages and Resultant Course of Action

Facility Representatives

Environmental Management:

There is a shortage of five FRs currently. The FR analysis showed that the EM facilities require 18.4 FTEs and are currently staffed with only 13 FRs. AMEM expects to hire five FRs in the near term.

Laboratory:

There is not a shortage of FRs currently.

Three facility representatives are currently in training: one FR is completing his facility-specific qualification and two recently hired FRs are currently completing their initial qualifications, one of whom has completed his interim qualifications.

The HFIR has one fully qualified FR assigned and one interim qualified FR. The FR Team Leader is also fully qualified on the facility. The 7920 and 7930 facilities have one assigned interim qualified FR on a part-time basis along with the FR on extended military leave. The 3019A and 3047 facilities have qualification packages and one FR is fully qualified on 3019A. Qualification packages have not been prepared for 3 facilities (3025E, 3525, and 2026).

Safety System Oversight Personnel

The AMESH organization is hiring two fire protection engineers and one criticality safety engineer who will provide matrix support to line management as needed for the existing SSO personnel/functions.

Environmental Management:

The analysis identified the need for a .1 FTE I&C SSO. The AMESH organization plans to assign an individual to fill this I&C SSO need in CY 2005.

Laboratory:

The ORNL Site Office has already designated the appropriate staff to fulfill the required SSO functions.

Section 4: Projected Staff Shortages and/or Surplus

Facility Representatives

Environmental Management:

Once the current shortage is filled, no shortages are projected for the long term. Surveillance and Maintenance (S&M) activities will continue at a peak, after which they will be reduced in frequency as the D&D activities come to a close. The monitoring of S&M activities will be reduced. As S&M activities are reduced, FR coverage will be reduced and transferred to the 25/27 Project.

One FR is currently eligible for retirement, two are eligible later in 2005, and one is eligible in 2007.

Laboratory:

Based on projected facility activity and hazard levels, the staffing needs for long term (~FY 2007) decrease slightly, but remain close to 5 FTEs. Therefore, the Site Office FR staffing should remain at the same levels: five full-time FRs plus the support of an FR-qualified team leader. In addition, a significant nuclear facility consolidation program is underway to reduce the number of nuclear facilities to three over the next several years.

One FR is eligible for retirement in 2007.

Safety System Oversight Personnel

Environmental Management:

One SSO will be eligible for retirement later in 2005.

Laboratory:

Two SSOs are currently eligible for retirement and one is eligible in 2007.

Section 5: Concerns and Recommendations

While the current analyses and projections show an adequate number of facility representatives, these calculations will need to be readdressed over the next few years, in light of anticipated retirements.

The December 2004 Review of the ORO Safety System Oversight Program revealed that the ORO Safety System Oversight Program continues to evolve. As such, SSO staffing requirements and assignments will likely change as they reflect the dynamics of the ORO mission and anticipated retirements. These changes, in turn, are underscored by ORO's commitment to implement the SSO Program.

The December 2003 report, *ORO Staffing Management Plan for Fiscal Years 2004 – 2009*, reported the following potential staffing gaps resulting from retirement and attrition throughout ORO:

- 42% of general engineers are eligible for retirement
- 33% of nuclear engineers are eligible for retirement
- 50% of safety engineers are eligible for retirement
- 50% of chemical engineers are eligible for retirement
- 60% of health physics personnel are eligible for retirement
- 55% of physical scientists are eligible for retirement
- 80% of safety and occupational health personnel are eligible for retirement

This will likely have an impact on the technical staffing throughout ORO over the long term. Since many of the staff in these occupations may assume SSO and/or FR positions during their careers, these projected shortages are likely to impact staffing of ORO's SSO and FR positions. ORO management is closely monitoring staffing needs and ceilings to ensure that resources are being utilized in the most effective manner possible.

Attachment 1
Facility Representative Staffing Analysis Worksheets

The following worksheets use a risk-based logic for facility representative (FR) staffing that was derived from the FTCP guidelines and DOE-STD-1063-2000, *Facility Representatives*. These worksheets address defense and non-defense nuclear facilities, while safety system oversight program only addresses defense nuclear facilities at AML and AMEM.

Laboratory:

AML FR Staffing								
Facility & Category	Description	Activity Level	Coverage Factor		Needed FTE		Explanatory Notes (Under Separate Cover)	Current Designated FRs*
			Near -term	Long-term	Near -term	Long-term		
HFIR (Cat 1)	Reactor	High	Continual	Continual	2.5	2.5		M. Woods, D. Reed
7920 (Cat 2)	REDC	Medium	Intermittent	Intermittent	.625	.625		C. Decker** L. Boyd
7930 (Cat 2)	REDC	Low	Occasional	Occasional	.25	.25		C. Decker** L. Boyd
3019A (Cat 2)	U^{233}	Medium	Intermittent	Frequent	.625	1.25		G. Clifton
3025E (Cat 3)	Irr. Mat'l Testing	Low	Seldom	Seldom	.125	.125		G. Clifton D. Paul
3525 (Cat 2)	Irr Fuel Lab	Low-Medium	Intermittent	Seldom	.625	.125		G. Clifton D. Paul
3047 (Cat 2)	Isotopes	Low	Seldom	N/A	.125	0		G. Clifton L. Boyd
2026 (Cat 3)	Analytical	Low-Medium	Occasional	N/A	.25	0		G. Clifton D. Paul
					5.125	**4.875**		**6.0**

* D. Reed is completing his facility-specific qualification, and two FRs (D. Paul, and L. Boyd) are completing their initial qualifications.

** C. Decker is on extended military leave.

Environmental Management:

AMEM FR Staffing				
Facility & Category	**Hazard Rating & Activity Level**	**Needed FTE (Adjusted)**	**Explanatory Notes (Under Separate Cover)**	**Current Designated FR***
ETTP				
K-25 Waste Management Activities (Cat 2)	Medium/Medium	.75		L. Brock, C. Hsieh
K-1065 RCRA Storage Facility (Cat 2)	Medium/High	1		L. Brock, C. Hsieh
ETTP Waste Management Activities (Rad)	Medium/High	.5		L. Brock, C. Hsieh
K-25/K-27 Hazards Abatement (Cat 2)	Medium/High	1		C. Eberle
K-25/K-27 Surveillance and Maintenance Activities (Cat 2)	Medium/Medium	.75		C. Eberle
K-25/K-27 Process Equipment Removal (Cat 2)	Medium/Medium	.75		C. Eberle
K-1064 Peninsula Project (Rad)	Medium/High	.5		R. Kirk
Balance of Site Labs D&D Project (Rad)	Medium/High	.5		R. Kirk
1070-A Classified Burial Ground (Rad)	Medium/Medium	.01		R. Kirk
Main Plant D&D (Rad)	Medium/Low	.005		R. Kirk
Powerhouse D&D (Rad)	Medium/Low	.005		R. Kirk
1070-B Classified Burial Ground (Rad)	Medium/Low	.005		R. Kirk
1070-C & D Classified Burial Ground (Rad)	Medium/Low	.005		R. Kirk
Poplar Creek D&D Project (Rad)	Medium/Low	.355		R. Kirk
K-770 Scrap Metal Reduction and Disposal Project (Rad)	Low/High	.1		R. Kirk
ETTP UF6 Cylinder Storage Yards (Cat 2)	High/High	1		K. Lanter
TSCA Incinerator (Rad)	Medium/High	1		K. Lanter
K-1420 Decontamination and Uranium Recovery (Rad)	Medium/Low	.005		K. Lanter
K-1407 Central Neutralization Facility (Rad)	Low/High	.1		K. Lanter
Three Building D&D (K-29, 31, & 33) (Cat 2)	High/High	1		R. Stroud, D. Emch
Three Building Surveillance and Maintenance Activities (Cat 2)	High/High	.25		R. Stroud, D. Emch
Total ETTP		**9.57**		
ORNL				
3517 Fission Product Development (FPO) Lab (Cat 2)	High/Low	.5		L. Brock
3019B (High-Level Radiation Analytical Facility) Building (Cat 2)	Low/Low	.1		L. Brock
Isotope Circle (3030, 3031, 3032, 3033, 3033A,)	Low/Low	.05		L. Brock
3038 Isotopes Development Lab (IDL) Building	Low/Low	.05		L. Brock
3026 C/D Old Radioactive Isotope Handling Facility (Rad)	Medium/Low	.005		L. Brock
Oak Ridge Research Reactor (Rad)	Medium/Low	.005		L. Brock
Homogenous Reactor Experiment (HRE) Structures (Cat 2)	Medium/Low	.25		L. Brock

AMEM FR Staffing				
Facility & Category	**Hazard Rating & Activity Level**	**Needed FTE (Adjusted)**	**Explanatory Notes (Under Separate Cover)**	**Current Designated FR***
TRU Waste Facility (Foster Wheeler) (Cat 2)	Medium/High	1		R. Farr
SWSA 4 Cap (Rad)	Medium/High	.5		J. Gonzalez
Balance of Melton Valley Cap (SWSA 5 & 6) (Rad)	Medium/High	.5		J. Gonzalez
Remediation of Trenches 5 & 7 (In-situ Grouting) (Rad)	High/High	.750		J. Gonzalez
Contaminated Soils and Sediments (Rad)	Medium/Low	.005		J. Gonzalez
TRU Trenches and Tank Remediation	Medium/Medium	.25		J. Gonzalez
New Hydrofracture Facility D&D (Rad)	Low/Medium	.005		J. Gonzalez
Wells P&A Phase II (Rad)	Low/Medium	.005		J. Gonzalez
Homogenous Reactor Experiment (HRE) Retention Basin (Cat 2)	Medium/Low	.25		J. Gonzalez
7503 Molten Salt Reactor Experiment (MSRE) (Cat 2)	Medium/High	1		W. Mansel
ORNL Abandoned Tanks Project D&D (Rad)	Low/Low	.001		C. Pilj
Tower Shielding (Cat 2)	Low/Low	.1		C. Pilj
FFA Tanks T1 and T2 HFIR (Cat 2)	High/Medium	.5		C. Pilj
Liquid Low Level Waste (LLLW) System (Cat 2)	Medium/High	1		C. Pilj
Gaseous Waste Disposal Facility (Rad)	Medium/Low	.005		C. Pilj
Bethel Valley Ground Water Engineering Study (Rad)	Medium/Low	.005		C. Pilj
Process Waste (Rad)	Medium/Medium	.005		C. Pilj
Solid Waste Management Facilities (Cat 2)	Medium/Low	.5		C. Wright
Cask Loading (Cat 2)	Medium/Low	.5		C. Wright
Total ORNL		**7.136**		
Y-12				
Sanitary Landfills (NonRad)	Ind/High	.01		C. Schiedel
Uranium Oxide Storage Vaults and Shed 9825 (Cat 2)	Low/Low	.1		C. Schiedel
Old Salvage Yard 9983-74 (Cat 3)	Low/Low	.05		C. Schiedel
West End Treatment Facility (WETF) (Rad)	High/High	.75		C. Schiedel
Environmental Management Waste Management Facility (EMWMF) (Rad)	Medium/High	.5		C. Schiedel
Environmental Management Waste Management Facility (EMWMF) Expansion (NonRad)				C. Schiedel
Central Pollution Control Facility (CPCF) (Rad)	Low/High	.01		C. Schiedel
ALPHA - 4 (Rad)	Low/Medium	.005		C. Schiedel
RCRA Staging and Storage Facility 9720-31 (Rad)	Low/Medium	.005		C. Schiedel
Warehouse 9 (RCRA Storage) 9720-9 (Rad)	Low/Medium	.005		C. Schiedel

AMEM FR Staffing				
Facility & Category	**Hazard Rating & Activity Level**	**Needed FTE (Adjusted)**	**Explanatory Notes (Under Separate Cover)**	**Current Designated FR***
Classified Waste Storage 9720-25 (Rad)	Low/Medium	.005		C. Schiedel
Uranium Chip Oxidation Facility 9401-5 (Rad)	Low/Medium	.005		C. Schiedel
Containerized Waste Storage Area 9983-16 (Rad)	Low/Medium	.005		C. Schiedel
Prep for D&D Facilities (Rad)	Low/Low	.001		C. Schiedel
Waste Transportation (Rad)	Ind/High	.1		C. Schiedel
Ground Water Treatment Facility 9616-07 (Rad)	Ind/High	.1		C. Schiedel
Non Destructive Assay Facility 9720-32 (Rad)	Ind/Medium	.005		C. Schiedel
Above Grade Storage Facility (Rad)	Ind/Medium	.005		C. Schiedel
Liquid Storage Facility (LSF) (Rad)	Ind/Medium	.005		C. Schiedel
Criticality Experiment Facility (NonRad)				C. Schiedel
Offsite				C. Schiedel
Enviro Services Facility 9624 (NonRad)	High/Medium	.05		C. Schiedel
East End Mercury Treatment System (NonRad)	Ind/Low	.001		C. Schiedel
East End VOC Facility 9422-22 (NonRad)	Ind/Low	.001		C. Schiedel
Y-12 Total		**1.72**		
EM Total		**18.4**	**Current FRs = 13**	

* Two FRs (C. Hsieh and D. Emch) are currently in training.

Attachment 2
SSO Staffing Analysis Worksheets

The following worksheets use a similar risk-based logic for SSO staffing as was used for the facility representative (FR) staffing. Though the FR worksheets address defense and non-defense nuclear facilities, the safety system oversight program only addresses defense nuclear facilities at AML and AMEM.

Importance Factor is a composite of the FTCP guideline for safety system type, size, complexity, condition and contractor system engineer (SE) program implementation and effectiveness; and is defined as high, medium, or low.

Coverage Factor is a composite of the FTCP guideline for SSO programmatic (e.g., system performance monitoring, inspection, and system tracking issues/actions) and administrative duties (e.g., status meetings with SEs and FRs, safety basis follow items, and program assessments); and is defined in terms of hours per month for oversight of the given safety system(s).

Note that while the staffing worksheets for AML and AMEM appear to differ, they employed the same risk-based logic. And they are organized differently because AML has only one defense nuclear facility and AMEM has 15, which are rolled up into a summary worksheet.

Laboratory:

AML SSO Staffing						
Facility & Category	**Safety System & Type**	**Importance Factor**	**Coverage Factor**	**Needed SSO FTE**	**Explanatory Notes**	**Current Designated SSO**
3019A (Cat. 2)	Storage Area (CS)	Low	10 hrs per month	.1 FTE	Collateral duty	R. McBroom*
	Sprinkler System (FP)	Medium	20 hrs per month	.15 FTE	Collateral duty	K. Russell**
	3020 Stack Monitoring System (I&C)	Low	10 hrs per month	.1 FTE	Collateral duty	J. Pearson*
	HVAC Fans (Vent)	Medium	20 hrs per month	.15 FTE	Collateral duty	R. Daniels
	Critical Lift Systems (H&R)	Low	10 hrs per month	.1 FTE	Collateral duty	J. Pearson*
			Total	**.6 FTE**		**4**

Key:

CS - Criticality Safety; FP - Fire Protection; I&C - Instrumentation and Control; Vent - HVAC; H&R - Hoisting & Rigging (particularly, critical lift systems)

* Matrixed from AMESH

** K. Russell is a contractor matrixed from AMESH (he also fulfills AMEM FP SSO functions)

Environmental Management:

AMEM SSO Staffing by Safety System		
Safety System (Detail Provided Below)	**Needed SSO FTE (Logic Based on Importance and Coverage Factors)**	**Explanatory Notes**
Criticality Safety	.25 FTE	ETTP CAAS: • K25 is HC-2 based on Criticality • Large Facility • Complex system • High Activity Level • Crit is High Worker Hazard • May transition from Fixed Base system to Portable System
Fire Protection	.25 FTE	• 7 facilities with Fire Sprinklers at 2 sites • 1 facility with a Dry Chemical System • Sprinkler systems are either Dry pipe or Wet Pipe – no pre-action etc. Therefore, fairly simple systems. • All sprinklers run off dedicated plant fire water systems • Single Dry chemical system covers modular unit (came installed from manufacturer)
Ventilation	.5 FTE	• Credited in 4 facilities • 2 facilities are ORNL Isotope Circle connected to ORNL's stack system. Ventilation for Hotcells • 2 facilities (MSRE and FW) credit ventilation system for general area zones
Instrumentation and Control	.1 FTE	• 3 electrically based systems at MSRE (NDA, HF Detector & Emergency Shutdown system) are only required for Fuel Salt Disposition activities. This are

AMEM SSO Staffing by Safety System		
Safety System (Detail Provided Below)	**Needed SSO FTE (Logic Based on Importance and Coverage Factors)**	**Explanatory Notes**

		scheduled to be completed September 2005
		• 6 systems at LLLW
		• Local Tank Volume Indicators on 19 Tanks (4 facilities=4 "systems")
		  ○ 3 different types
		  ○ 13 tanks use moveable probe/microprocessor based system
		  ○ 6 tanks use either a Radar based system or a bubbler system (all 6 tanks have both systems-DSA requires one of the two to be operational)
		• Transfer Pump Disconnects
		  ○ 4 disconnects (2 each at 2 facilities)
		  ○ Simple knife switches
		3 systems at MSRE will be used short term. Disconnects at LLLW are very simple. Tank Indicators are standard tank indicating devices.

Total	**1.1 FTEs**	

AMEM SSO Staffing by Facility and Specific Safety System		
Facility & Category	**Safety System & Type**	**Current Designated SSO***
ETTP Bldgs K-25 (Cat 2) and K-27 (Cat 3)	Rad. Criticality Accident Alarm System (RCAAS) (CS)	B. Hawks*
ETTP Bldg K-25 (Cat 2)	Fire Suppression Sprinklers (FP)	K. Russell
ETTP Bldg K-1065 (Cat 2)	Wet Pipe Sprinkler System (FP)	K. Russell
	Dry Chem Extinguisher Systems (FP)	K. Russell
MSRE Bldg 7503 (Cat 2)	Hydrogen Fluoride (HF) Detectors (I&C)	TBD

AMEM SSO Staffing by Facility and Specific Safety System		
Facility & Category	**Safety System & Type**	**Current Designated SSO***
	Containment Ventilation System (Vent)	S. Foster
	Nuclear Data Analysis (NDA) System (CS)	TBD
	Emergency S/D System (I&C)	TBD
	Fire Protection Sprinkler Systems (FP)	K. Russell
ORNL Bldg 3038 (Cat 2)	Process Off-Gas (POG) System (Vent)	S. Foster
ORNL Bldg 3517 (Cat 2)	Cell Ventilation System (Vent)	S. Foster
ORNL Bldg 2531 (Cat 2)	Local Tank Volume Indication Systems (I&C)	TBD
ORNL Bldg 2537 (Cat 2)	Local Tank Volume Indication Systems (I&C)	TBD
	Transfer Pumps, Electrical Disconnect Devices (I&C)	TBD
ORNL Bldg 7830 (Cat 2)	Local Tank Volume Indication Systems (I&C)	TBD
ORNL Bldg 7856 (Cat 2)	Local Tank Volume Indication Systems (I&C)	TBD
	Transfer Pumps, Electrical Disconnect Devices (I&C)	TBD
ORNL Melton Valley Solid Waste Storage Facility 7572 (Cat 2)	Fire Protection Sprinkler Systems (FP)	K. Russell
ORNL Melton Valley Solid Waste Storage Facility 7574 (Cat 2)	Fire Protection Sprinkler Systems (FP)	K. Russell
ORNL Melton Valley Solid Waste Storage Facility 7879 (Cat 2)	Fire Protection Sprinkler Systems (FP)	K. Russell
TRU/Alpha LLW Treatment Proj (Cat 2)	Ventilation System	S. Foster
TRU/Alpha LLW Treatment Proj (Cat 2)	Fire Sprinkler Systems	K. Russell
	Total	**3**

* B. Hawks' Criticality Safety qualification is in progress, however, she holds an interim qualification for CAAS (according to the EM SSO coordinator).